REMARKS AND ARGUMENTS

Status of the Application

Claims 1-27 are pending in the subject application. Claims 1-6 and 24 are rejected under 35 USC § 102. Claims 7-17 and 23 are allowed. Claims 18-22 and 25-27 are objected as being dependent upon a rejected base claim. By way of this response, Applicants have added new claims 28-49.

Rejection under 35 USC §102

Claims 1-6 and 24 are rejected under 35 USC § 102(e) as being anticipated by Noh (US 6,363,021). Applicants respectfully disagree.

Claim 1 and newly added claim 40 recite a redundancy unit comprising first and second fuse blocks coupled to a redundant element via a passive selection circuit. The first fuse block includes at least one first-type fuse for programming the redundancy unit prior to packaging while the second fuse block includes at least one second-type fuse for programming the redundancy unit after packaging. The passive selection circuit, for example, without being electrically programmed, passes information stored in the first fuse block if the first fuse block has been programmed or passes information stored in the second fuse block if the second fuse block has been programmed.

Noh discloses a redundancy circuit having first and second fuse blocks, each including first and second main fuses. The fuse blocks are coupled to a decoder circuit via a control circuit. The decoder circuit contains fuses which are programmed to store addressing information associated with the redundant cells of the redundancy circuit. See Noh, col. 5, 43-50. When the main fuse in the first fuse block is cut and the second main fuse is not cut, this

indicates that the redundant cells associated with the redundancy circuit is used to replace defective cells. However, if the redundant cells are defective, than the second main fuse is also cut to disable the redundancy circuit from replacing the defective cells with the defective redundant cells.

Although Noh teaches first and second fuse blocks, the fuse blocks are not used to store information, such as addressing information, for programming the redundancy unit, as with the present invention. Instead, Noh's fuse blocks are used to enable or disable the redundancy circuit. Noh's fuses which are programmed with information for redundancy is stored in the decoder, not in the first and second fuse blocks. The use of first and second fuse blocks associated with a redundant element which can be programmed for redundancy by either the first or second fuse blocks is nowhere taught or suggested by Noh.

Furthermore, even if the fuses in Noh's first and second fuse blocks could be considered fuses which store information for programming redundancy, it still fails anticipate the invention as recited in claims 1 and 40. In particular, the fuses of the first and second fuse blocks of present invention are of different types, one for programming prior to while the other for programming after packaging. Noh nowhere teaches or suggests the use of different types of fuses in respective first and second fuse blocks associated with a redundant element for programming prior to and after packaging.

In addition, claims 1 and 40 further recite a passive selection circuit that passes information from the first or second fuse block, depending on which fuse block has been programmed with information for redundancy. The passive selection circuit, for example, does not need electrical programming to selectively pass information from the first or second fuse blocks. Such passive selection circuit comprises, for example, an OR or an XOR gate, as recited in, for example, claims 20, 21, 32 or 40. The use of a passive selection circuit is nowhere taught

or suggested by Noh or the remaining art of record, alone or in combination. Therefore, Applicants submit that claims 1 and 40 are patentable over Noh or the remaining art of record, including those references cited in an information disclosure statement filed on April 19, 2004. Since claims 2-6, 18-22 and newly added claims 30-39 and 41-49 are directly or indirectly dependent on claims 1 or 40, while newly added claims 28 and 29 are indirectly dependant on allowed claim 23, these claims are also patentable.

With respect to the rejection to claim 24, Applicants have amended it to be dependent on allowed claim 23. Applicants therefore submit that claim 24 is now patentable.

Objection to the Claims

Claims 18-22 and 25-27 are objected to as being dependent upon a rejected base claim, but would be allowable is rewritten in independent form including all the limitations of the base claim. With respect to claims 18-22, Applicants submit that this basis of objection is moot in view of the amendments to claim 1. As for claims 25-27, Applicants also submit that this basis of objection is moot in view of the amendment to claim 24.

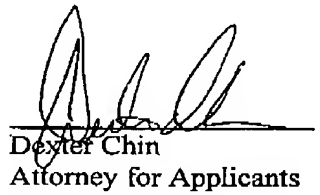
Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance and the issuance of a formal Notice of Allowance at an early date is respectfully requested.

Should the Examiner believe that a telephone conference would expedite prosecution of this application, please telephone the undersigned attorney at his number set out below.

Date: August 12, 2004

Respectfully submitted,



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